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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/774,278	02/06/2004	Prasad Y. Duggirala	7548 D1	8497

7590 01/03/2005

Nalco Company  
Patent & Licensing Department  
1601 W. Diehl Road  
Naperville, IL 60563-1198

EXAMINER
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ALVO, MARC S

ART UNIT	PAPER NUMBER
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1731

DATE MAILED: 01/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/774,278	Applicant(s) DUGGIRALAS ET AL	
	Examiner Steve Alvo	Art Unit 1731	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

**A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.**

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 16 November 2004.  
 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.  
 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 2, 4 and 6 is/are pending in the application.  
     4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
 6) ☒ Claim(s) 2, 4 and 6 is/are rejected.  
 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
     a) ☐ All    b) ☐ Some \* c) ☐ None of:  
         1. ☐ Certified copies of the priority documents have been received.  
         2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
         3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)                                    | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2, 4 and 6 are rejected under 35 U.S.C. 103(a) as obvious over JAPANESE

DISCLOSURE NUMBER 5-302288 (translation used for rejection).

JAPANESE DISCLOSURE NUMBER 5-302288 teaches pretreating mechanical pulp (e.g. ground or refined pulp) before bleaching to eliminate the polyvalent metal ions (chelate) which have an adverse effect on peroxide bleaching (page 5, paragraphs 0002-0006).

JAPANESE DISCLOSURE NUMBER 5-302288 lists many chelating agents including organic sulfides (see equations on pages 2, 3, 5 and polymers listed on pages 5-8) including dithiocarbamates (paragraph 0012). It would have been obvious that the mechanical pulp of JAPANESE DISCLOSURE NUMBER 5-302288 is ground or refined as all mechanical pulp is made by grinding or refining. Any difference between the claimed chelating agents and the chelating agents of JAPANESE DISCLOSURE NUMBER 5-302288 would have been obvious modifications of the chelating agents of JAPANESE DISCLOSURE NUMBER 5-302288. See paragraph 0030, for 0.04-0.8% chelating agent dry pulp. It would have been obvious to adjust the amount of chelating agent depending upon the amount type of pulp used, and/or depending upon the amount of polyvalent metal ions in the pulp and depending upon the desired amount of bleaching.

Applicant has not argued that the claimed chelating agents of JAPANESE DISCLOSURE NUMBER 5-302288 are any different than the claimed chelating agents. It has

only been argued that the instant process uses less chelating agent than JAPANESE DISCLOSURE NUMBER 5-302288. First of all the claims are not limited to an upper limit of 0.02 weight %. The claims call for “about 0.02 weight %” (emphasis added). The term “about” would include weights above “0.02 weight %”, e.g. amounts within 10% of 0.02. However, the disclosure of JAPANESE DISCLOSURE NUMBER 5-302288 is not limited to 0.04 weight percent. JAPANESE DISCLOSURE NUMBER 5-302288 clearly states that “There is no specific limitation on the amount of water-soluble polymers used” (translation, page 8, [30]. JAPANESE DISCLOSURE NUMBER 5-302288 further states that “The bleaching properties tend to decline if less than 0.04 wt. % is used.”. Thus, the bleaching agent is a rate effective variable. Besides the amount of organic sulfide chelating agent added to the pulp is a rate effective variable. One having ordinary skill in the art would have found it obvious to vary the amount of chelating agent as a known result effective variable. See *In re Scholler*, 141 USPQ 825. The specific percentage of chelating agent is within the realm of optimization of ordinary skill, see *In re Boesch* 205 USPQ 215. At best Applicant is optimizing the “conditioning” of the prior art. There is a reasonable expectation that the chelating of the prior art would yield a chelated pulp having the desired amount of bleaching. *In re O’Farrel*, 7 USPQ2d 1673, 1680-81. In any event, it is well settled that an artisan with ordinary skill would have found it obvious to determine workable or even optimum values for an art recognized, result effective parameter, such as the proper amount of bleaching, *In re Boasch*, 205 USPQ 215, 219; *In re Aller*, 105, USPQ 233, 235.

The 35 USC 112 rejection has been dropped as Applicant has explained that this is weight of active ingredient per weight dry pulp.

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

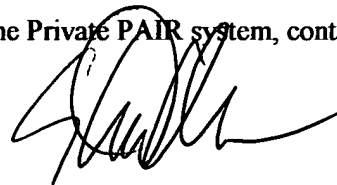
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing

date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steve Alvo whose telephone number is 571-272-1185. The examiner can normally be reached on 5:45 AM - 2:15 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Griffin can be reached on 571-272-1189. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Steve Alvo  
Primary Examiner  
Art Unit 1731

msa